UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/692,913	10/24/2003	Ray Y. Lai	5681-66303	9034

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

DETAILED ACTION

Claims 1 – 17 have been examined.

Claims 18 – 92 can be filed as Divisional Applications.

Drawings

1.   New corrected drawings in compliance with 37 CFR 1.121(d) are required in this

application because shading makes text unreadable. Applicant is advised to employ the services

of a competent patent draftsperson outside the Office, as the U.S. Patent and Trademark Office

no longer prepares new drawings. The corrected drawings are required in reply to the Office

action to avoid abandonment of the application. The requirement for corrected drawings will not

be held in abeyance.

Information Disclosure Statement

2.   The Information Disclosure Statement filed June 1, 2006 has been considered.

Claim Rejections - 35 USC § 102

3.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the

basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in a patent granted on an application for patent by another filed in the United
> States before the invention thereof by the applicant for patent, or on an international application by another who
> has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention
> thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999

(AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002

do not apply when the reference is a U.S. patent resulting directly or indirectly from an

international application filed before November 29, 2000. Therefore, the prior art date of the

reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA

35 U.S.C. 102(e)). Effective filing date of the instant application is August 18, 2003.

4.   Claims 1 – 4, 8 – 10 and 13 - 14 are rejected under 35 U.S.C. 102(e) as being anticipated

by "Building Web Applications with UML", Second Edition, Jim Conallen, October 10, 1002

(Web).

Claim 1
Web anticipates a system for integrating Web Services with a business system (Web, page 9, last
paragraph), comprising: a processor; and a memory comprising program instructions, wherein
the program instructions are executable by the processor (Web, page 10, Figure 2-1, and text) to:
generate an integrated Web Service architecture (Web, page 10, Figure 2-1 and pages 65-66 –
UDDI and pages 64-65 – SOAP and pages 66 – 68, WSDL) comprising a plurality of
heterogeneous components of the business system in accordance with one or more integration
design patterns (Web, page 425, Master Template Pattern or classes – one example in Figure 6-
11, pages115); wherein, to generate an integrated Web Service architecture (As per above), the
program instructions are further executable by the processor to: generate one or more Use Cases
for the integrated Web Service (Web, page 173 – 185, 120, 216, 411—414, 101-105, 177-179,
139-141, 179-183); generate a high-level architecture for the integrated Web Service (As per
above) , wherein the high-level architecture identifies two or more entities of the integrated Web
Service (Web, page 438) and the relationships and interactions among the entities (Web, page
177, relationship); and generate a logical architecture for the integrated Web Service according
to the Use Cases (Web, pages 237-242), wherein the logical architecture identifies two or more
logical components of the integrated Web Service (Web, page 237-242) and the relationship
among the logical components (Web, page 237-242) , and wherein the logical architecture
comprises two or more layers (Web, page 237-242).

Claim 2
The system as recited in claim 1, wherein, to generate an integrated Web Service architecture
(See the rejection for claim 1) , the program instructions are further executable by the processor
(See the rejection for claim 1) to: define a plurality of integration tiers (Web, pages 431 – 439,
tiers), one or more basic components (Web, page 35, classes of an HTML document)
, and one or more Web Services technologies for integration (Web, page Explorer, page 84) ; and
define how each of the plurality of integration tiers communicates with others of the plurality of
integration tiers (Web, pages 431 – 439, tiers).

Claim 3
The system as recited in claim 2, wherein the plurality of integration tiers comprises one or more
of: a client tier (Web, page 431) , a presentation tier (Web, page 435), a business tier (Web, page

115, Business Requirements), an integration tier (Web, page 122, Figure 6-15) , and a resources tier (Web, page 438-439 or left side of 115).

Claim 4
The system as recited in claim 1, wherein, to generate an integrated Web Service architecture , the program instructions are further executable by the processor to define integration of one or more Enterprise Application Interface (EAI) products with the one or more Web Services technologies (See the rejection for claim 1 – ability to integrate more than 1 web service).

Claim 8
The system as recited in claim 1, wherein the integrated Web Service architecture comprises : a service provider configured to provide one or more services on an integrated Web Service business system implemented according to the integrated Web Service architecture ; and one or more service requesters configured to access the one or more services from the service provider via a network (See the rejection for claim 1 and a web application, pages 22-23).

Claim 9
The system as recited in claim 8, wherein the integrated Web Service business system is a Business-to-Consumer system , wherein the service provider is a business service provider , and wherein the service requester is an end user (See the rejection for claim 1 and a web application, pages 22-23).

Claim 10
The system as recited in claim 8, wherein the integrated Web Service business system is a Business-to-Business system , wherein the service provider is a business service provider , and wherein the service requester is a business server (See the rejection for claim 1 and a web application, pages 22-23).

Claim 13
The system as recited in claim 1, wherein the design patterns include one or more integration design patterns See the rejection for claim 1.

Claim 14
The system as recited in claim 13, wherein the integration design patterns include one or more of: an Application-to-Application design pattern (See the rejection for claim 1 – basic object to object messaging built from defined classes – in figures) ; a Standard Build design pattern; a Hub-Spoke Replication design pattern ; a Federated Replication design pattern; a Multi-Step Application integration design pattern ; and a Data Exchange design pattern.

Claim Rejections - 35 USC § 103

5.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
> section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are
> such that the subject matter as a whole would have been obvious at the time the invention was made to a person
> having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the
> manner in which the invention was made.

6.   Claims 5 – 7 and 11-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over

by "Building Web Applications with UML", Second Edition, Jim Conallen, October 10, 1002

(Web) in view of Object-Oriented Information Systems Planning and Implementation, David A.

Taylor, April 10, 1992.

Motivation to Combine Web and Taylor

Web teaches an integrated environment to generate a web service and the ability to build classes/ patterns to support the development. It is Taylor who teaches the old and well known technique of wrapping legacy systems (Taylor, pages 296 – 299, wrappers). Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to combine Web with Taylor, because the ability for newly developed systems to interact with existing systems reduces development cost.

Claim 5
The system as recited in claim 1, wherein the business system is an Enterprise business system (Taylor, pages 296 – 299, wrappers).

Claim 6
The system as recited in claim 1, wherein the business system is a Cross Enterprise business system (Taylor, pages 296 – 299, wrappers).

Claim 7
The system as recited in claim 1, wherein the plurality of heterogeneous components of the business system includes one or more legacy mainframe systems (Taylor, pages 296 – 299, wrappers).

Claim 11
The system as recited in claim 1, wherein the design patterns include one or more Mainframe integration and interoperability design patterns (Taylor, pages 296 – 299, wrappers).

Claim 12
The system as recited in claim 11, wherein the Mainframe integration and interoperability design
patterns include one of a Synchronous Mainframe Web Services design pattern (web, page 56
and 63 – RPC) and an Asynchronous Mainframe Web Services design pattern (Web, page 273-
279 – ability to process a method).

7.   Claims 15 and 16 rejected under 35 U.S.C. 103(a) as being unpatentable over Web as

applied to claim 1 above, and further in view of the Hazards of Closed-Process Development,

Mark Smith, February 2003.

Claim 15
The system as recited in claim 1, wherein the design patterns include one of a Closed Process
integration design pattern and an Open Process integration design pattern (Closed, page 1).
Web teaches implementation of Web integrated services but does not explicitly mention Closed
Process. It is Closed who teaches Closed-Process. Therefore, it would have been obvious to one
of ordinary skill in the art at the time of invention to implement a closed process design pattern.

Claim 16
The system as recited in claim 15, wherein the design patterns include one of a Service
Consolidation-Broker integration design pattern and a Reverse Auction-Broker integration
design pattern.
Interpretation
Present limitations are deemed data. The ability to select from lists is supported by presentation
layer of Web. the content is data.

8.   Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Web as applied to

claim 1 above, and further in view of Essential Guide to Object Monitors, Karen Boucher et al,

March 1999 (Monitor).

Claim 17
The system as recited in claim 1, wherein the layers comprise two or more of:
a network layer configured to serve as an underlying network for integrated Web Services
implemented according to the integrated Web Service architecture ; a transport layer for
delivering messages between components of the integrated Web Services (Web, pages 84-85,
MIME or page 13, TCP); a service description language layer configured to describe service type
(See claim 1 WSDL) and functionality of the integrated Web Services (See claim 1 – designing
the application); a transaction routing layer configured to route messages on the transport layer
(TCP above and Web, page 145) ; a service discovery layer configured to search for (HTTP
below) and locate the integrated Web Services; a service negotiation layer configured to

negotiate exchanges between service requesters and service providers implemented according to the integrated Web Service architecture (Web, page 273-279); a management layer configured for provisioning of the integrated Web Services (Web, page 52-55) and for monitoring (Monitor, page pages 45- 47) and administration of the integrated Web Services (Web, page 221); a Quality of Service layer configured to provide reliability (Web, pages 99, 127), scalability (Web, inherent with object technology) , and availability for the integrated Web Services (see claim 1) ; a security layer configured to provide authentication (Web, page 14) , entitlement (Web, page 87), and nonrepudiation security on the transport layer (Web, page 13); and an Open Standards layer (Web, page 13). Web teaches a flexible integrated environment for web services but does not explicitly teach monitoring. It is Monitor who teaches monitoring (Monitor, pages 45-47). Therefore, it would have been obvious to one of ordinary skill in the art to combine the teachings of Web and Monitor because monitors make systems more reliable.

Examiner's Comment

9.   Prior action stated the Applicant's response was non-responsive. Applicant's remarks of

August 30, 2007 are accurate. The Examiner missed the election of Applicant in July 3, 2007

response of Applicant. This was a mistake by the Office and not the Applicant. Please, indicate

claims 18 – 92 have been canceled in response to this action.
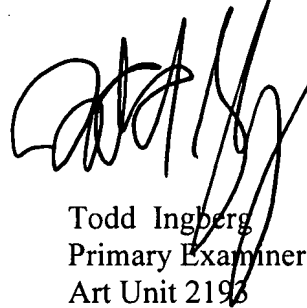
Correspondence Information

10.   Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Todd Ingberg whose telephone number is (571) 272-3723. The

examiner can normally be reached on during the work week..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Meng-Ai An can be reached on (571) 272-3756. The fax phone number for the

organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would

like assistance from a USPTO Customer Service Representative or access to the automated

information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Todd Ingberg
Primary Examiner
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TI